Static and dynamic balance ability, lumbo-pelvic movement control and injury incidence in cricket pace bowlers

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What is the problem and what is known about it so far?
Pace bowling places a lot of force on to the lower back, especially when attempting to improve ball release speed. This can make bowlers more prone to injuries. Muscle dysfunction may further contribute to injuries in pace bowlers. An individual with muscle dysfunction may be unable to control the amount of movement that takes place at a specific joint. Pace bowlers that present with uncontrolled movement as well as muscle imbalances have an even bigger risk of sustaining injuries. There is also a relationship between poor balance and a higher incidence of injuries.

Why did the researchers do this particular study?
The researchers wanted to investigate the relationship between balance, how well the pace bowlers can control their movement, and injuries. They looked at this at the beginning and at the end of the cricket season.

Who was studied?
Thirty-two, healthy, injury free, male premier league pace bowlers between 18 and 26 years of age.

How was the study done?
Each bowler had to undergo a pre-season testing regimen. Each month of the cricket season, the bowlers were required to complete a questionnaire where they recorded their injuries. At the end of the season, the bowlers had to undergo the same testing regimen as the one done before the season started.

The bowlers had to do the following tests: Single leg balance test; star excursion balance test and lumbo-pelvic movement control tests. Values were calculated and tests were rated so that the researchers were able to analyse the data with statistical software.

What did the researchers find?
Lumbo-Pelvic movement control tests were not able to discriminate between bowlers who sustained an injury and those who did not. The single leg balance test and the star excursion balance test were better at the start of the season for the bowlers who did not sustain an injury during the season. The lumbo-pelvic movement control and balance test were better at the end of the cricket season.

What are the implications of the study?
Poor single leg balance and star excursion tests may be an indication that a bowler is at a higher risk of injury.